

**CAMECO RESOURCES  
CROW BUTTE OPERATION**



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April 23, 2015

ATTN: Document Control Desk Director  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Semiannual Radiological Effluent and Environmental Monitoring Report  
Source Materials License # SUA-1534, Docket No. 40-8943

Dear Document Control:

By letter dated February 26, 2015, Crow Butte Resources, Inc. submitted one copy of the Semiannual Radiological Effluent and Environmental Monitoring Report for the Crow Butte Uranium Project. The report is provided in accordance with License Condition 11.1(B) of Source Materials License SUA-1534 and 10 CFR Part 40. The report covered the third and fourth quarters of 2014. Crow Butte has discovered that the data sheets submitted in Appendix D were incomplete and did not include the Deep Disposal Well data for December 2014. Please find enclosed the replacement pages for this report.

If you have any questions concerning the report, please feel free to call me at (308) 665-2215 ext. 114.

Sincerely,  
CAMECO RESOURCES

Larry Teahon  
Manager of Safety, Health, Environment, & Quality

cc: Ron Burrows - NRC  
Nancy Harris - NDEQ, Lincoln Office  
CBO File

cc: CR – Casper Office

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**Crow Butte Uranium Mine**  
**Deep Disposal Well #1 Injection Radiological Data**

Month	Total Gallons Injected	Average Natural Uranium (mg/l)	Total Natural Uranium Injected (mg)	Total Natural Uranium Injected (μCi)	Average Radium- 226 (pCi/l)	Total Radium- 226 Injected (μCi)
July-14	8,510,580	5	1.61E+08	1.09E+05	1,360	4.38E+04
August-14	8,046,324	6	1.83E+08	1.24E+05	1,340	4.08E+04
September-14	8,510,580	5	1.61E+08	1.09E+05	1,360	4.38E+04
October-14	9,108,009	4	1.38E+08	9.34E+04	937	3.23E+04
November-14	7,573,418	5	1.43E+08	9.70E+04	1,060	3.04E+04
December-14	7,895,884	4	1.20E+08	8.09E+04	850	2.54E+04
Totals	49,644,795		9.06E+08	6.13E+05		2.17E+05

**Crow Butte Uranium Mine**  
**Deep Disposal Well #2 Injection Radiological Data**

Month	Total Gallons Injected	Average Natural Uranium (mg/l)	Total Natural Uranium Injected (mg)	Total Natural Uranium Injected (μCi)	Average Radium- 226 (pCi/l)	Total Radium- 226 Injected (μCi)
July-14	1,465,597	1	5.55E+06	3.76E+03	973	5.40E+03
August-14	1,489,622	1	5.64E+06	3.82E+03	780	4.40E+03
September-14	1,465,597	1	5.55E+06	3.76E+03	973	5.40E+03
October-14	1,538,981	1	5.83E+06	3.94E+03	1,250	7.28E+03
November-14	1,375,108	1	5.21E+06	3.52E+03	860	4.48E+03
December-14	1,499,470	1	5.68E+06	3.84E+03	542	3.08E+03
Totals	8,834,375		3.34E+07	2.26E+04		3.00E+04